

CUTTING METHOD OF SEMICONDUCTOR CHIP

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Abstract

PURPOSE: To efficiently cut a semiconductor chip using a sapphire substrate by irradiating a laser light from the back surface side of a sapphire substrate to scribe it.

CONSTITUTION: A sapphire substrate 1 formed with a plurality of semiconductor elements 3 is so placed on the stage 5 of a laser scribe with the front surface side of the substrate 1 is downside. Then, the transparent property of the sapphire substrate 1 is utilized to meet the array of the elements 3 formed with the movement of the stage 5, laser light 4 is irradiated from the back surface of the substrate 1 to scribe it, and the semiconductor chips are divided. Thus, laser light is irradiated to the rough back surface of the substrate by effectively melting the irradiated portion without transmitting the substrate to easily work the cutting line of the substrate.

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